

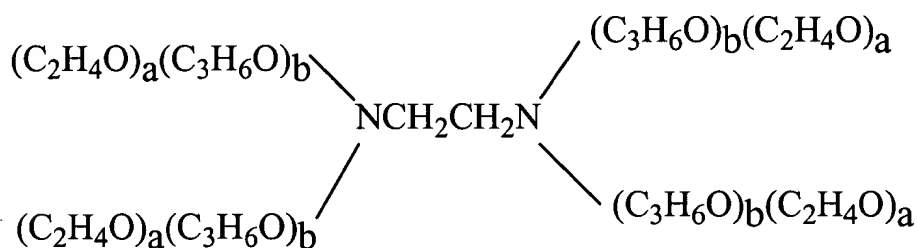
Amendments to the Claims

Listing of Claims

This listing of claims will replace all prior versions, and listings, of claims in the application:

1. (Currently Amended) A composition comprising,
 one or more nucleic acid sequences selected from the group consisting of oligonucleotides, antisense oligonucleotides, triplex DNA compounds, ribozymes, and mixtures thereof; and

an octablock copolymer, wherein the octablock copolymer has the following formula:



wherein:

the mean aggregate molecular weight of the portion of the octablock copolymer represented by polyoxypropylene is between about 5000 and about 7000 Daltons;

a is a number such that the portion represented by polyoxyethylene constitutes between about 10% to and about 40% of the octablock copolymer by weight; and

b is a number such that the polyoxypropylene portion of the total molecular weight of the octablock copolymer constitutes between about 60% and about 90% of the octablock copolymer by weight.

2. (Previously Presented) The composition of Claim 1, wherein:

the mean aggregate molecular weight of the portion of the octablock copolymer represented by polyoxypropylene is about 6750 Daltons;

a is a number such that the portion represented by polyoxyethylene constitutes about 10% of the octablock copolymer by weight; and

b is a number such that the polyoxypropylene portion of the total molecular weight of the octablock copolymer constitutes about 90% of the octablock copolymer by weight.

3. (Previously Presented) The composition of Claim 1, wherein:

the mean aggregate molecular weight of the portion of the octablock copolymer represented by polyoxypropylene is about 5750 Daltons;

a is a number such that the portion represented by polyoxyethylene constitutes approximately 10% of the octablock copolymer by weight; and

b is a number such that the polyoxypropylene portion of the total molecular weight of the octablock copolymer constitutes about 90% of the octablock copolymer by weight.

4. (Previously Presented) The composition of Claim 1, wherein:

the mean aggregate molecular weight of the portion of the octablock copolymer represented by polyoxypropylene is about 5220 Daltons;

a is a number such that the portion represented by polyoxyethylene constitutes about 10% of the octablock copolymer by weight; and

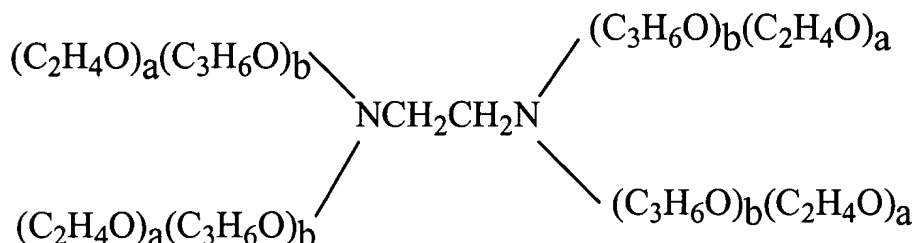
b is a number such that the polyoxypropylene portion of the total molecular weight of the octablock copolymer constitutes about 90% of the octablock copolymer by weight.

5. (Previously Presented) The composition of Claim 1, wherein the one or more nucleic acid sequences are antisense oligonucleotides.

6. (Previously Presented) The composition of Claim 1, further comprising approximately 0.1% to approximately 5% by weight of a surfactant and approximately 0.5% to approximately 5% by volume of a low molecular weight alcohol.

7. (Previously Presented) The composition of Claim 6, wherein the surfactant is polyoxyethylene (20) sorbitan monooleate and the alcohol is ethanol.

8. (Currently Amended) A composition comprising,
one or more nucleic acid sequences which encode a gene product; and
an octablock copolymer, wherein the octablock copolymer has the following formula:



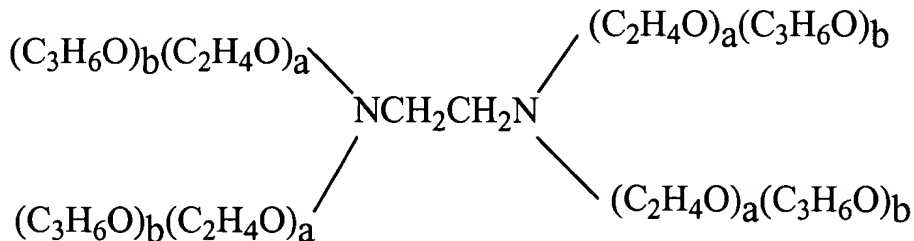
wherein:

the mean aggregate molecular weight of the portion of the octablock copolymer represented by polyoxypropylene is between about 5000 and about 7000 Daltons;

a is a number such that the portion represented by polyoxyethylene constitutes between about 10% ~~to~~ and about 40% of the octablock copolymer by weight; and

b is a number such that the polyoxypropylene portion of the total molecular weight of the octablock copolymer constitutes between about 60% and about 90% of the octablock copolymer by weight.

9. (Currently Amended) A composition comprising,
one or more nucleic acid sequences selected from the group consisting of oligonucleotides, antisense oligonucleotides, triplex DNA compounds, ribozymes, and mixtures thereof; and an octablock copolymer, wherein the octablock copolymer has the following formula:



wherein:

the mean aggregate molecular weight of the portion of the octablock copolymer represented by polyoxypropylene is between about 5000 and about 7000 Daltons;

a is a number such that the portion represented by polyoxyethylene constitutes between about 10% ~~to~~ and about 40% of the octablock copolymer by weight; and

b is a number such that the polyoxypropylene portion of the total molecular weight of the octablock copolymer constitutes between about 60% and about 90% of the octablock copolymer by weight.

10. (Previously Presented) The composition of Claim 9, wherein:

the mean aggregate molecular weight of the portion of the octablock copolymer represented by polyoxypropylene is about 6750 Daltons;

a is a number such that the portion represented by polyoxyethylene constitutes about 10% of the octablock copolymer by weight; and

b is a number such that the polyoxypropylene portion of the total molecular weight of the octablock copolymer constitutes about 90% of the octablock copolymer by weight.

11. (Previously Presented) The composition of Claim 9, wherein:

the mean aggregate molecular weight of the portion of the octablock copolymer represented by polyoxypropylene is about 5750 Daltons;

a is a number such that the portion represented by polyoxyethylene constitutes approximately 10% of the octablock copolymer by weight; and

b is a number such that the polyoxypropylene portion of the total molecular weight of the octablock copolymer constitutes about 90% of the octablock copolymer by weight.

12. (Previously Presented) The composition of Claim 9, wherein:

the mean aggregate molecular weight of the portion of the octablock copolymer represented by polyoxypropylene is about 5220 Daltons;

a is a number such that the portion represented by polyoxyethylene constitutes about 10% of the octablock copolymer by weight; and

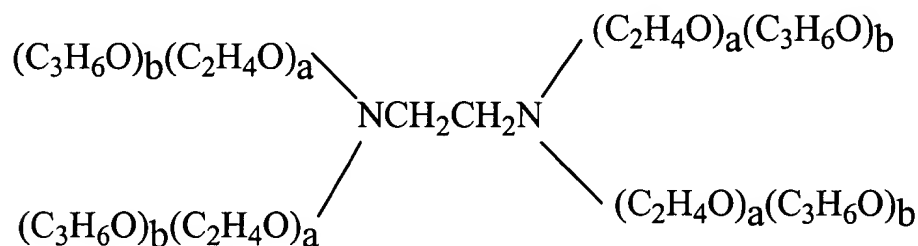
b is a number such that the polyoxypropylene portion of the total molecular weight of the octablock copolymer constitutes about 90% of the octablock copolymer by weight.

13. (Previously Presented) The composition of Claim 9, wherein the one or more nucleic acid sequences are antisense oligonucleotides.

14. (Previously Presented) The composition of Claim 9, further comprising approximately 0.1% to approximately 5% by weight of a surfactant and approximately 0.5% to approximately 5% by volume of a low molecular weight alcohol.

15. (Previously Presented) The composition of Claim 14, wherein the surfactant is polyoxyethylene (20) sorbitan monooleate and the alcohol is ethanol.

16. (Currently Amended) A composition comprising,
 one or more nucleic acid sequences which encode a gene product; and
 an octablock copolymer, wherein the octablock copolymer has the following formula:



wherein:

the mean aggregate molecular weight of the portion of the octablock copolymer represented by polyoxypropylene is between about 5000 and about 7000 Daltons;

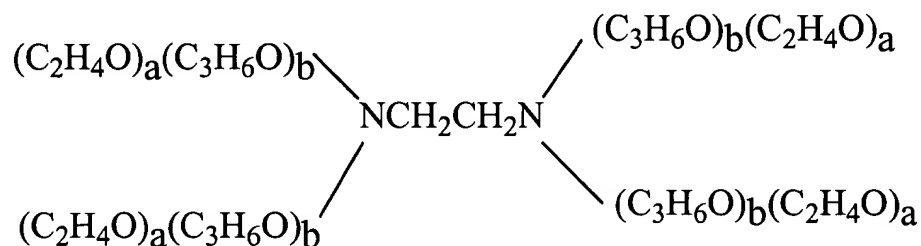
a is a number such that the portion represented by polyoxyethylene constitutes between about 10% ~~to~~ and about 40% of the octablock copolymer by weight; and

b is a number such that the polyoxypropylene portion of the total molecular weight of the octablock copolymer constitutes between about 60% and about 90% of the octablock copolymer by weight.

17. (Currently Amended) A composition comprising,

one or more nucleic acid sequences selected from the group consisting of oligonucleotides, antisense oligonucleotides, triplex DNA compounds, ribozymes, and mixtures thereof; and

an octablock copolymer, wherein the octablock copolymer has the following formula:



wherein:

the mean aggregate molecular weight of the portion of the octablock copolymer represented by polyoxypropylene is between about 5000 and about 7000 Daltons;

a is a number such that the portion represented by polyoxyethylene constitutes between about 5% to and about 20% of the octablock copolymer by weight; and

b is a number such that the polyoxypropylene portion of the total molecular weight of the octablock copolymer constitutes between about 80% and about 95% of the octablock copolymer by weight.

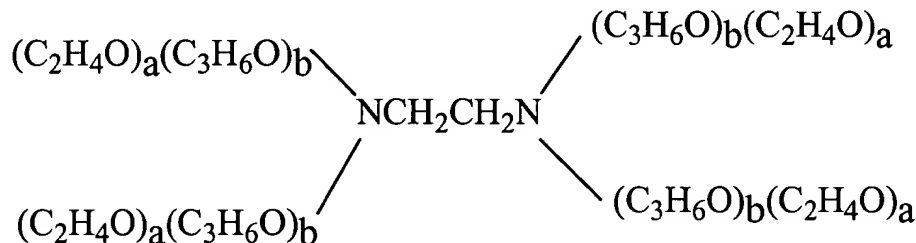
18. (Previously Presented) The composition of Claim 17, wherein:

the mean aggregate molecular weight of the portion of the octablock copolymer represented by polyoxypropylene is about 6750 Daltons;

a is a number such that the portion represented by polyoxyethylene constitutes about 10% of the octablock copolymer by weight; and

b is a number such that the polyoxypropylene portion of the total molecular weight of the octablock copolymer constitutes about 90% of the octablock copolymer by weight.

19. (Currently Amended) A method of delivering a molecule to an animal comprising, administering to the animal a composition comprising one or more nucleic acid sequences selected from the group consisting of oligonucleotides, antisense oligonucleotides, triplex DNA compounds, ribozymes, and mixtures thereof; and an octablock copolymer, wherein the octablock copolymer has the following formula:



wherein:

the mean aggregate molecular weight of the portion of the octablock copolymer represented by polyoxypropylene is between about 5000 and about 7000 Daltons;

a is a number such that the portion represented by polyoxyethylene constitutes between about 10% to and about 40% of the octablock copolymer by weight; and

b is a number such that the polyoxypropylene portion of the total molecular weight of the octablock copolymer constitutes between about 60% and about 90% of the octablock copolymer by weight.

20. (Previously Presented) The method of Claim 19, wherein the mean aggregate molecular weight of the portion of the octablock copolymer represented by polyoxypropylene is about 6750 Daltons; a is a number such that the portion represented by polyoxyethylene constitutes about 10% of the octablock copolymer by weight; and

b is a number such that the polyoxypropylene portion of the total molecular weight of the octablock copolymer constitutes about 90% of the octablock copolymer by weight.

21. (Previously Presented) The method of Claim 19, wherein
the mean aggregate molecular weight of the portion of the octablock copolymer represented by polyoxypropylene is about 5750 Daltons;

a is a number such that the portion represented by polyoxyethylene constitutes approximately 10% of the octablock copolymer by weight; and

b is a number such that the polyoxypropylene portion of the total molecular weight of the octablock copolymer constitutes about 90% of the octablock copolymer by weight.

22. (Previously Presented) The method of Claim 19, wherein
the mean aggregate molecular weight of the portion of the octablock copolymer represented by polyoxypropylene is about 5220 Daltons;

a is a number such that the portion represented by polyoxyethylene constitutes about 10% of the octablock copolymer by weight; and

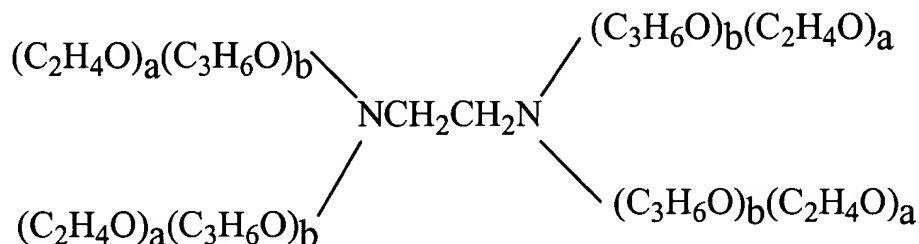
b is a number such that the polyoxypropylene portion of the total molecular weight of the octablock copolymer constitutes about 90% of the octablock copolymer by weight.

23. (Previously Presented) The method of Claim 19, wherein the one or more nucleic acid sequences are antisense oligonucleotides.

24. (Previously Presented) The method of Claim 19, wherein the composition further comprises approximately 0.1% to approximately 5% by weight of a surfactant and approximately 0.5% to approximately 5% by volume of a low molecular weight alcohol.

25. (Previously Presented) The method of Claim 24, wherein the surfactant is polyoxyethylene (20) sorbitan monooleate and the alcohol is ethanol.

26. (Currently Amended) A method of delivering a molecule to an animal comprising, administering to the animal a composition comprising one or more nucleic acid sequences which encode a gene product, and an octablock copolymer, wherein the octablock copolymer has the following formula:



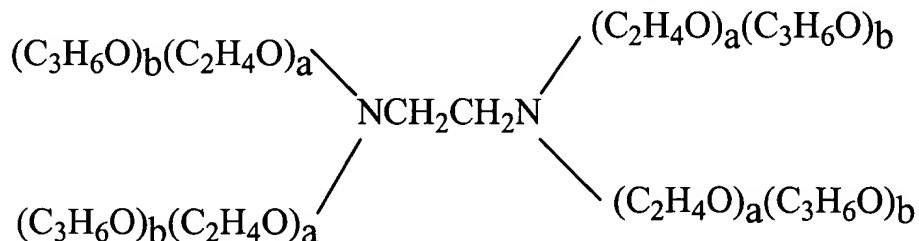
wherein:

the mean aggregate molecular weight of the portion of the octablock copolymer represented by polyoxypropylene is between about 5000 and about 7000 Daltons;

a is a number such that the portion represented by polyoxyethylene constitutes between about 10% ~~to~~ and about 40% of the octablock copolymer by weight; and

b is a number such that the polyoxypropylene portion of the total molecular weight of the octablock copolymer constitutes between about 60% and about 90% of the octablock copolymer by weight.

27. (Currently Amended) A method of delivering a molecule to an animal comprising, administering to the animal a composition comprising one or more nucleic acid sequences selected from the group consisting of oligonucleotides, antisense oligonucleotides, triplex DNA compounds, ribozymes, and mixtures thereof; and an octablock copolymer, wherein the octablock copolymer has the following formula:



wherein:

the mean aggregate molecular weight of the portion of the octablock copolymer represented by polyoxypropylene is between about 5000 and about 7000 Daltons;

a is a number such that the portion represented by polyoxyethylene constitutes between about 10% to and about 40% of the octablock copolymer by weight; and

b is a number such that the polyoxypropylene portion of the total molecular weight of the octablock copolymer constitutes between about 60% and about 90% of the octablock copolymer by weight.

28. (Previously Presented) The method of Claim 27, wherein:

the mean aggregate molecular weight of the portion of the octablock copolymer represented by polyoxypropylene is about 6750 Daltons;

a is a number such that the portion represented by polyoxyethylene constitutes about 10% of the octablock copolymer by weight; and

b is a number such that the polyoxypropylene portion of the total molecular weight of the octablock copolymer constitutes about 90% of the octablock copolymer by weight.

29. (Previously Presented) The method of Claim 27, wherein:

the mean aggregate molecular weight of the portion of the octablock copolymer represented by polyoxypropylene is about 5750 Daltons;

a is a number such that the portion represented by polyoxyethylene constitutes approximately 10% of the octablock copolymer by weight; and

b is a number such that the polyoxypropylene portion of the total molecular weight of the octablock copolymer constitutes about 90% of the octablock copolymer by weight.

30. (Previously Presented) The method of Claim 27, wherein:

the mean aggregate molecular weight of the portion of the octablock copolymer represented by polyoxypropylene is about 5220 Daltons;

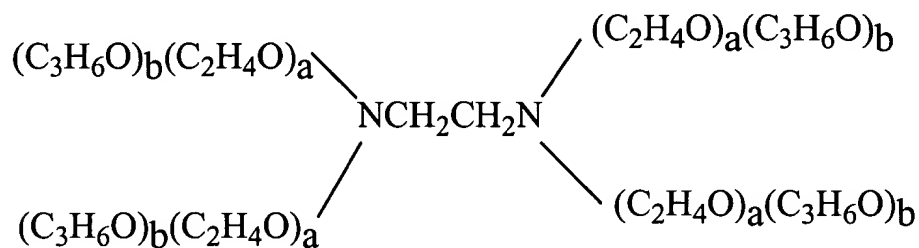
a is a number such that the portion represented by polyoxyethylene constitutes about 10% of the octablock copolymer by weight; and

b is a number such that the polyoxypropylene portion of the total molecular weight of the octablock copolymer constitutes about 90% of the octablock copolymer by weight.

31. (Previously Presented) The method of Claim 27, wherein the one or more nucleic acid sequences are antisense oligonucleotides.

32. (Previously Presented) The method of Claim 27, wherein the composition further comprises approximately 0.1% to approximately 5% by weight of a surfactant and approximately 0.5% to approximately 5% by volume of a low molecular weight alcohol.

33. (Currently Amended) A method of delivering a molecule to an animal comprising, administering to the animal a one or more nucleic acids sequences selected from the group consisting of oligonucleotides, antisense oligonucleotides, triplex DNA compounds, ribozymes, and mixtures thereof; and an octablock copolymer, wherein the octablock copolymer has the following formula:



wherein:

the mean aggregate molecular weight of the portion of the octablock copolymer represented by polyoxypropylene is between about 5000 and about 7000 Daltons;

a is a number such that the portion represented by polyoxyethylene constitutes between about 5% to and about 20% of the octablock copolymer by weight; and

b is a number such that the polyoxypropylene portion of the total molecular weight of the octablock copolymer constitutes between about 80% and about 95% of the octablock copolymer by weight.

34. (Previously Presented) The method of Claim 33, wherein
the mean aggregate molecular weight of the portion of the octablock copolymer represented by polyoxypropylene is about 6750 Daltons;

a is a number such that the portion represented by polyoxyethylene constitutes about 10% of the octablock copolymer by weight; and

b is a number such that the polyoxypropylene portion of the total molecular weight of the octablock copolymer constitutes about 90% of the octablock copolymer by weight.

35. (Previously Presented) The method of Claim 33, wherein
the mean aggregate molecular weight of the portion of the octablock copolymer represented by polyoxypropylene is about 5750 Daltons;

a is a number such that the portion represented by polyoxyethylene constitutes approximately 10% of the octablock copolymer by weight; and

b is a number such that the polyoxypropylene portion of the total molecular weight of the octablock copolymer constitutes about 90% of the octablock copolymer by weight.

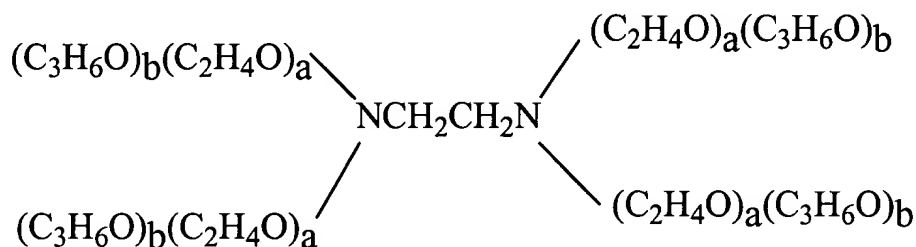
36. (Previously Presented) The method of Claim 33, wherein
the mean aggregate molecular weight of the portion of the octablock copolymer represented by polyoxypropylene is about 5220 Daltons;

a is a number such that the portion represented by polyoxyethylene constitutes about 10% of the octablock copolymer by weight; and

b is a number such that the polyoxypropylene portion of the total molecular weight of the octablock copolymer constitutes about 90% of the octablock copolymer by weight.

37. (Previously Presented) The method of Claim 32, wherein the surfactant is polyoxyethylene (20) sorbitan monooleate and the alcohol is ethanol.

38. (Currently Amended) A method of delivering a molecule to an animal comprising, administering to the animal a composition comprising one or more nucleic acid sequences which encode a gene ~~products~~ product, and an octablock copolymer, wherein the octablock copolymer has the following formula:



wherein:

the mean aggregate molecular weight of the portion of the octablock copolymer represented by polyoxypropylene is between about 5000 and about 7000 Daltons;

a is a number such that the portion represented by polyoxyethylene constitutes between about 10% ~~to~~ and about 40% of the octablock copolymer by weight; and

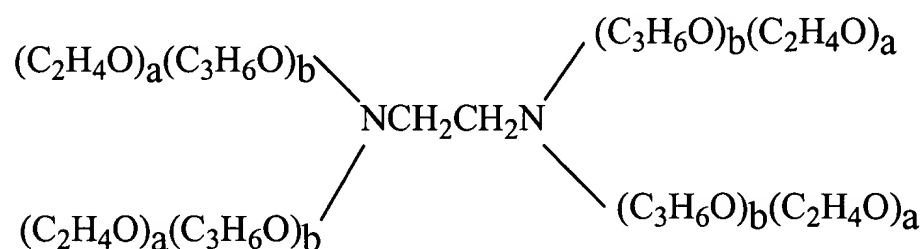
b is a number such that the polyoxypropylene portion of the total molecular weight of the octablock copolymer constitutes between about 60% and about 90% of the octablock copolymer by weight.

39. (Previously Presented) The composition of Claim 17, wherein the polyoxypropylene portion of the total molecular weight of the octablock copolymer is greater than 90% and less than about 95%.

40. (Previously Presented) The method of Claim 33, wherein the polyoxypropylene portion of the total molecular weight of the octablock copolymer is greater than 90% and less than about 95%.

41. (Currently Amended) A composition comprising,
 one or more nucleic acid sequences selected from the group consisting of
 oligonucleotides, antisense oligonucleotides, triplex DNA compounds, ribozymes, and mixtures
 thereof; and

an octablock copolymer, wherein the octablock copolymer has the following formula:



wherein:

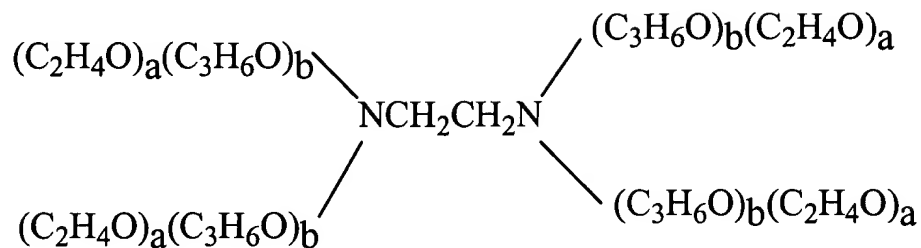
the mean aggregate molecular weight of the portion of the octablock copolymer
 represented by polyoxypropylene is between about 5000 and about 7000 Daltons;

a is a number such that the portion represented by polyoxyethylene constitutes between
 about 5% ~~to~~ and about 20% of the octablock copolymer by weight; and

b is a number such that the polyoxypropylene portion of the total molecular weight of the
 octablock copolymer is greater than 80% and less than about 95% of the octablock copolymer.

42. (Previously Presented) A method of delivering a molecule to an animal comprising,
 administering to the animal a composition comprising one or more nucleic acid
 sequences selected from the group consisting of oligonucleotides, antisense oligonucleotides,
 triplex DNA compounds, ribozymes, and mixtures thereof; and

an octablock copolymer, wherein the octablock copolymer has the following formula:



wherein:

the mean aggregate molecular weight of the portion of the octablock copolymer represented by polyoxypropylene is between about 5000 and about 7000 Daltons;

a is a number such that the portion represented by polyoxyethylene constitutes less than 10% and more than about 5% of the octablock copolymer by weight; and

b is a number such that the polyoxypropylene portion of the total molecular weight of the octablock copolymer is greater than 90% and less than about 95% of the octablock copolymer.